987.DURBAN CASTLE
1006.PRETORIA CASTLE

RETAIN

②

H&W
987/1006

Fog & bhd profile

003958-003963-0032

Nos 987 & 1006

FRAMING AND BULKHEAD PROFILE

DIMENSIONS 560-0" × 76-0" × 37-0" TO UPPER DECK

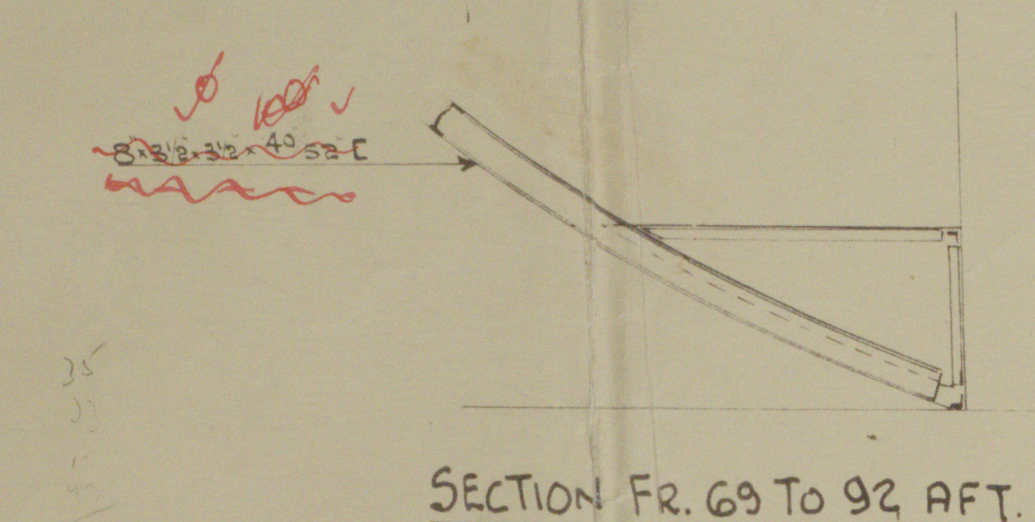
SCALES 1/8" = ONE FOOT (PROFILE)
1/4" = ONE FOOT (DETAILS)

ALL SCANTLINGS - N.B.S.

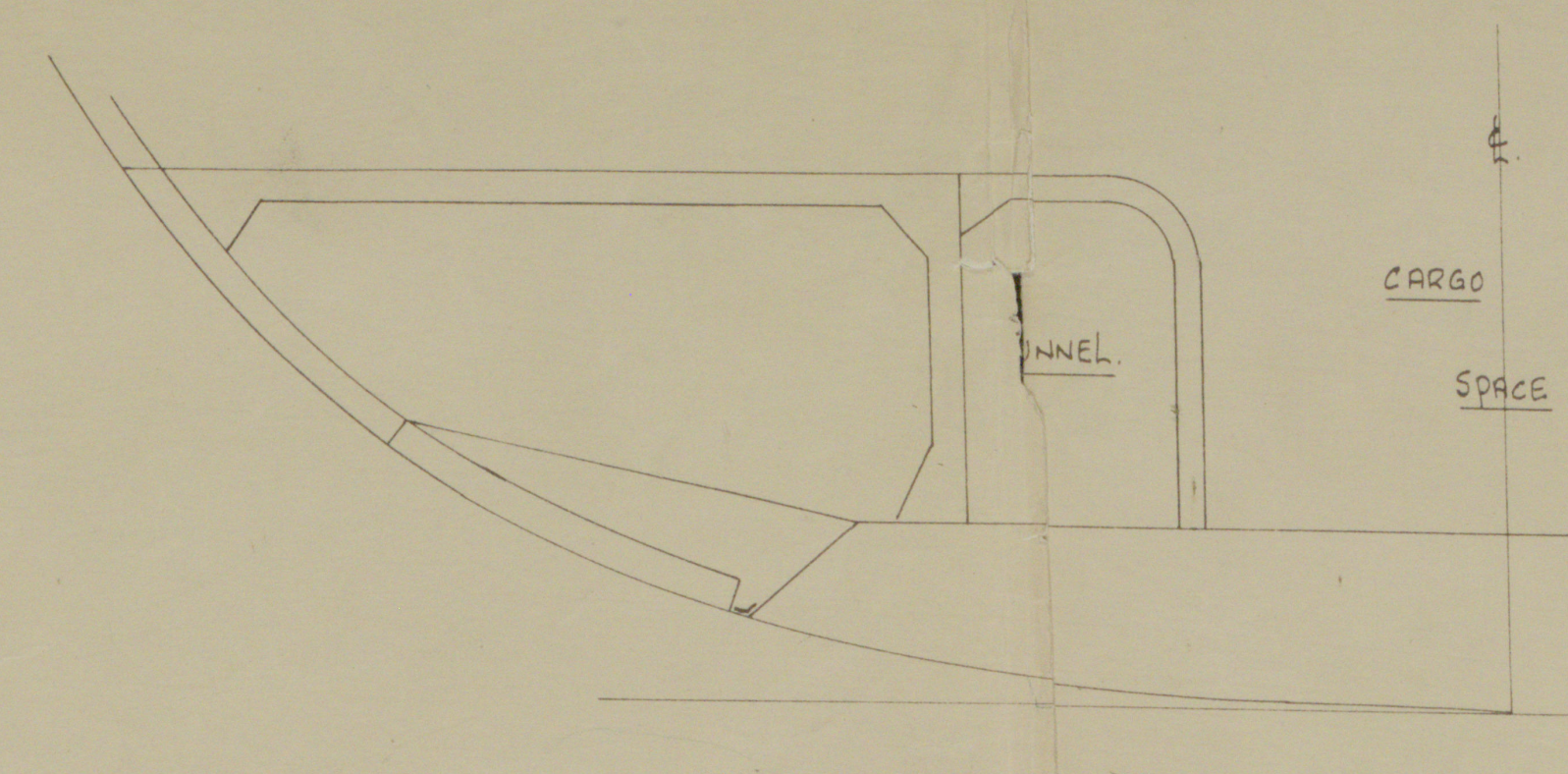
AFT END FRAMING WITH BOSSING TO BE SUBMITTED LATER
NAV BRIDGE
CHART ROOM
WHEEL HOUSE
OFFICERS
STORE
BOAT DECK
PROM DECK
UPPER PROM DECK
SHADE DECK
UPPER DECK
MAIN DECK
LOWER DECK
PASSENGERS
STEERING GEAR
INSULATED CARGO SPACE
CARGO SPACE
WATER BALLAST
TUNNEL RECESS
FRESH WATER
FRESH WATER OR WATER BALLAST
MOTOR ROOM
STORES
BAGGAGE
CREW
FO'CLE DECK
FORE END FRAMING SUBMITTED SEPARATELY
NO REVERSE FRAMES
TANK TOP PLATING CARRIED OUT LEVEL TO SHIP SIDE
EVERY ALT. FRAME TO F'CLE DECK
Frames in Aft Fuel Tks. to be Considered in Conjunction with Plan of Girders &c.

X End attachment accepted but between bracket & lug on a/c of size of Stiffs.

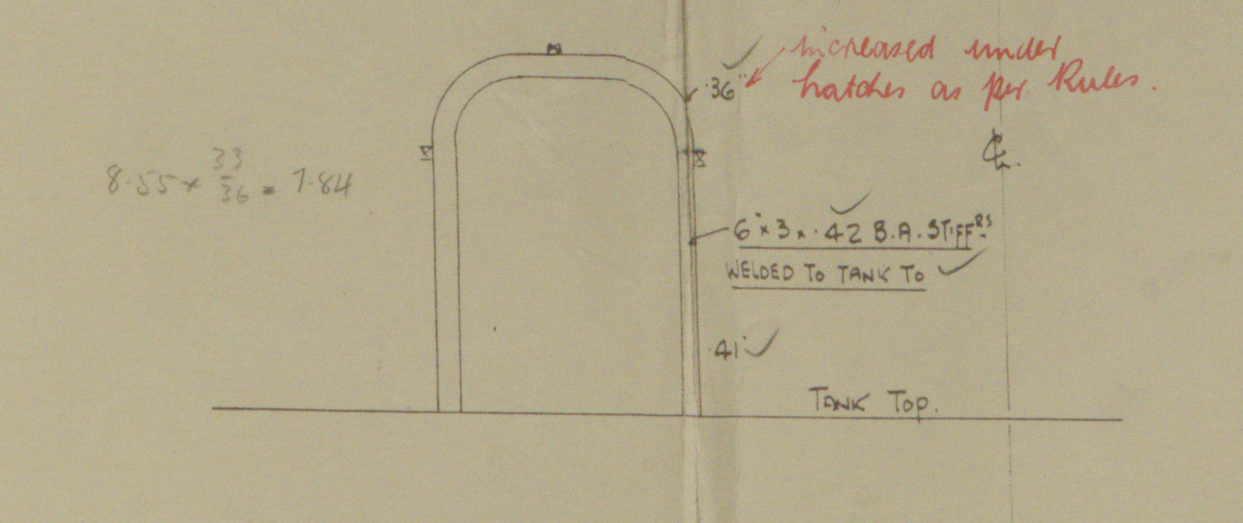
X See Mid. Section re Rev Frames.


8 1/2 × 3 1/2 × 40/53 C

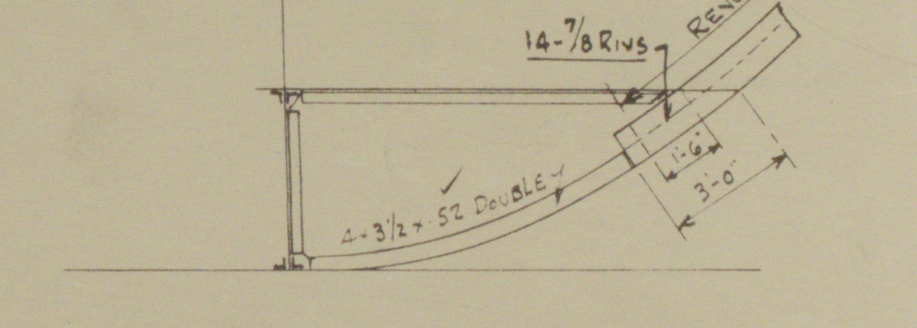
SECTION FR. 69 TO 92 AFT.


TUNNEL
CARGO
SPACE

SECTION FRS 47 - 68 AFT


Increased under hatches as per Rules.
6" × 3 × 42 B.A. STIFF
WELDED TO TANK TOP
TANK TOP

SECTION THRO' TUNNEL.
FRS 26 - 44 AFT.


14 - 7/8 RIVS
REVERSE BAR
3'-0

SECTION FRS 65-97 FORD

15. 2. 37

HARLAND & WOLFF LTD.
LONDON, GLASGOW
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LIVERPOOL & SOUTHAMPTON
SHIPBUILDERS & ENGINEERS
3rd Feb 37

003958-003963-0032

HARLAND & WOLFF

Nos 987 & 1006

DECKS PLAN

⑧

M/M-2630

987 DURBAN CASTLE ×
BEL RPT. 12.276

1006 PRETORIA CASTLE
BEL. RPT 12363

002630-002638-0002

30.4.37

PARTS HATCHED RED

DECK PLATES RIVETED & UNDERSLUGGED AND BUTTS WELDED ON BEAMS FOR FLUSH ST. DECKS

Nos 987 & 1006

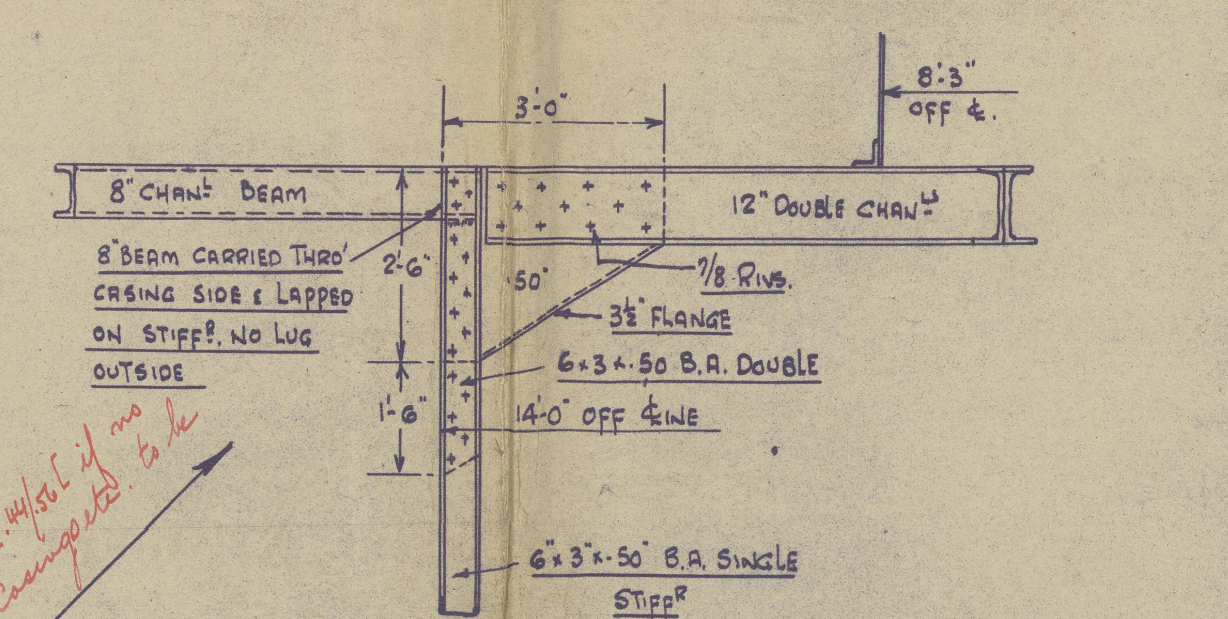
PLAN OF STEEL DECKS

Scale 1/8 = 1 foot

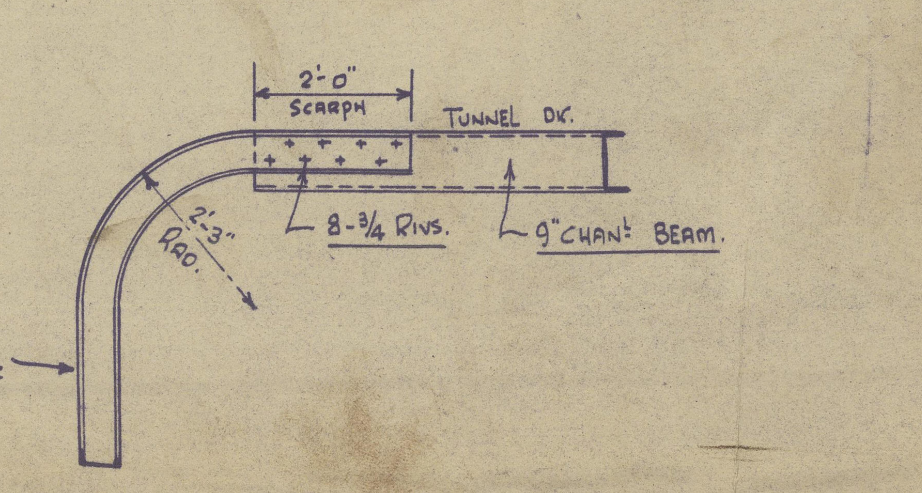
DIM.:- 560'-0" B.P. × 76'-0" × 37'-0" MLD. TO UPPER DECK.

TO CLASS 100. A.1. WITH FREEBOARD CORRESPONDING TO ALL SEASON'S.

MOULDED DRAFT NOT EXCEEDING 29'-0" ALL SECTION'S N.B.S


3'-0"
8'3" OFF ℄.
8" CHANL BEAM
12" DOUBLE CHANL
8" BEAM CARRIED THRO' CASING SIDE & LAPPED ON STIFFR. NO LUG OUTSIDE
2'-6"
1'-6"
7/8 RIVS.
3½" FLANGE
6×3×.50 B.A. DOUBLE
14'-0" OFF ℄INE
6"×3"×.50" B.A. SINGLE STIFFR

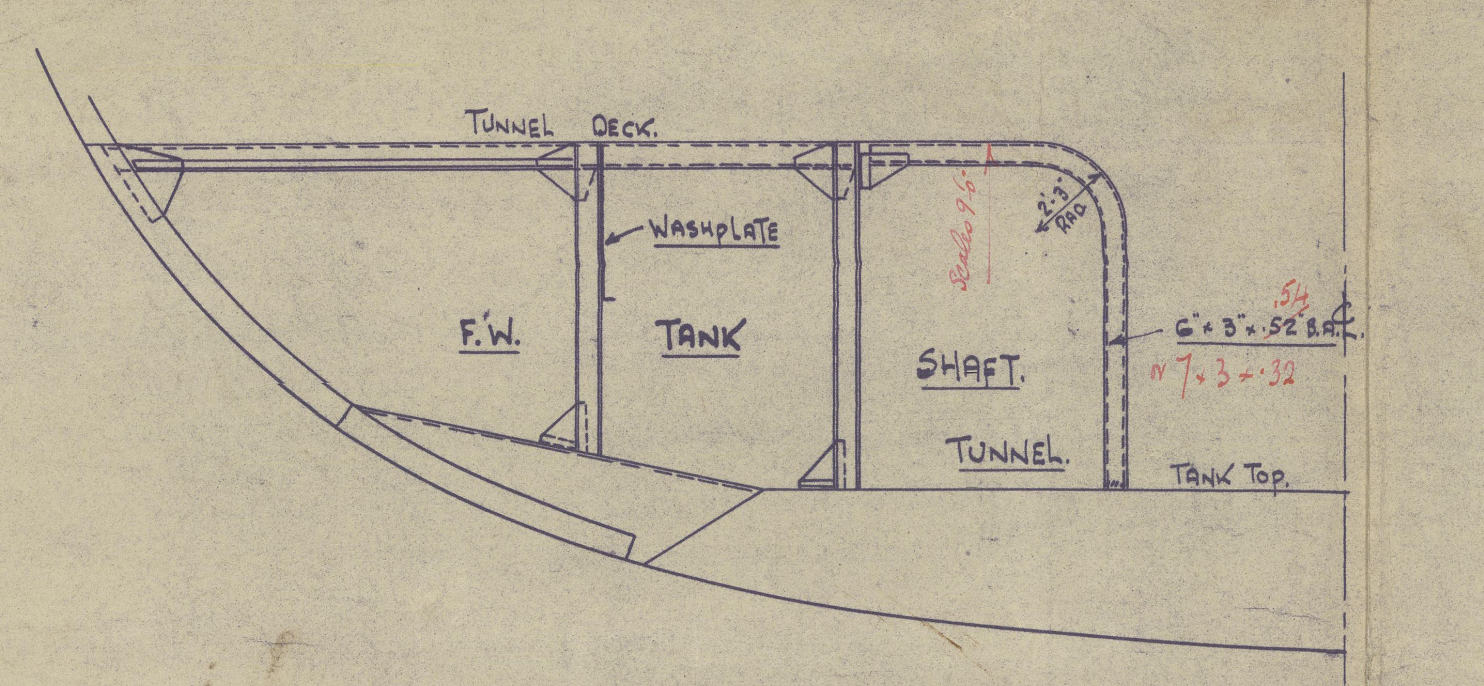
BRIDGE DECK.
BRIDGE
BRIDGE DK.
3/4 LENGTH
3/5 LENGTH
1/2 LENGTH
Casing may be single 10"×3½×3½×.44/.56 [if no ... to be carried. Support of casing etc. to be shown on Casing Plan.
No 5 HATCH
No 4 HATCH
No 3 HATCH
No 2 HATCH
No 1 HATCH
MOTOR CASING
F'CLE DECK.
PLATING 26"
DECK WOOD SHEATHED.
SHADE DECK.
SHADE
MOTOR
CASING
6¼ TEAK SHEATHING IN WELL
UPPER DECK.
UPPER
MOTOR
CASING
26 FRAME SPACING
31 FRAME SPACING
MAIN DECK.
W.T. FLAT
MOTOR
CASING
AUX MOTOR
CASING
NOTE – ALL WELDS ON TOP
33 SPACING
27 SPACING
24 SPACING
LOWER DECK
TUNNEL RECESS TOP & F.W. TANK.
MOTOR ROOM
AUX MOTOR ROOM
FUEL
OIL
FUEL BUNKERS TO BE SUBMITTED LATER
EVAPORATORS FLAT
3/4 LENGTH
3/5 LENGTH
1/2 LENGTH
33 FRAME SPACING
27 FRAME SPACING
24 FRAME SPACING


2'-0"
SCARPH
TUNNEL DK.
2'-3" RAD.
8-3/4 RIVS.
9" CHANL BEAM.
TUNNEL SIDE

DETAIL OF BEAM SCARPH

Scale ½" = 1 foot

FRS. 54-61 AFT.


TUNNEL DECK.
WASHPLATE
F.W.
TANK
SHAFT.
TUNNEL.
2'-3" RAD.
6"×3"×.52 B.A.
7×3×.32
TANK TOP.

SECTION THRO' F.W. TANK. & SHAFT TUNNEL.

FRS. 48 - 55 AFT.

Scale ¼" = 1 foot

RETAIN

~~18~~ 8

Harland & Wolff's.
987 & 1006.

987. DURBAN CASTLE
1006. PRETORIA CASTLE

Plan of shelt decks.

Warwick Castle

~~102~~

003958-003963-0033

Deck
Plan shewing extent of
flush deck plating in lieu of aranbee deck covering

003958-003963-0033

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Lloyd's Register
Foundation

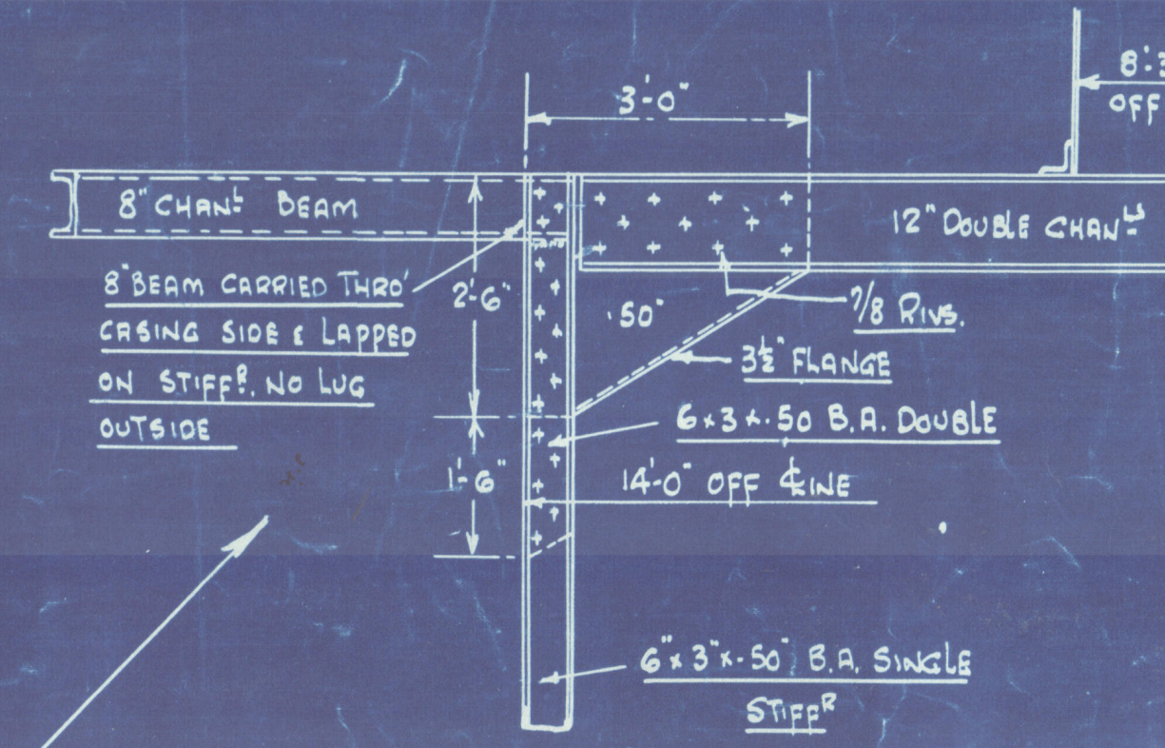
Nos 987 & 1006

PLAN OF STEEL DECKS

Scale 1/8 = 1 foot

DIM.:- 560'-0" B.P. × 76'-0" × 37'-0" MLD. TO UPPER DECK.

TO CLASS 100. A.1. WITH FREEBOARD CORRESPONDING TO ALL SEASON'S.
MOULDED DRAFT NOT EXCEEDING 29'-0"
ALL SECTION'S N.B.S



BRIDGE DECK.
3/4 LENGTH
3/5 LENGTH
1/2 LENGTH
Prom Deck (Bridge for Pt 2)
per B Set.
STRINGER ANGLE 3½ × 3½ × ·34
STRINGER PLATE 38" × ·34
GIRDER UNDER
STEEL BHD UNDER.
Nº5 HATCH
Nº4 HATCH
Nº3 HATCH
MOTOR CASING
L.E.A.
8 × ·44 × 3½ × 3½ × ·52 CHANNL
KNEES 28½ × ·54 - 6-7/8 RIVS.
F'CLE DECK.
Nº1 HATCH
18'-0 × 16'-0
PLATING ·32
DECK WOOD SHEATHED
SHADE DECK.
Upper B Set
STRINGER ANGLE 5 × 5 × ·48
PL 44" × ·48
STEEL BHD.
MOTOR
CASING.
SKYLIGHT
15' SALOON
DOME
5×3 TEAK
SHEATHING IN WELL
Nº2 HATCH
35'-3" × 16'-6"
UPPER DECK.
OVERHANG OF BEAMS ON ALL DECKS
TO BE CONSIDERED WITH CASING PLAN.
18'-0"
22'-0"
W.T.B.
43" × ·38
6 × 3" × ·44 B.A.
18" × ·40 4-7/8 R.
Old note?
STEEL DECKS

PARTS TINTED RED
DECK SEAMS RIVETED AND UNDERJOGGLED
AND BUTTS WELDED ON BEAMS
FOR FLUSH STEEL DECK
SEE DETAILS ON SEPARATE PLAN

See Deck plans already approved,

for L.R.

HARLAND & WOLFF LTD
LONDON GLASGOW
2/8/37
BELFAST
LIVERPOOL SOUTHAMPTON
SHIPBUILDERS & ENGINEERS

HARLAND & WOLFF

No. 987 & 1006

MIDSHIP SECTION

①

✓ "DURBAN CASTLE

M/M. 2630

987 DURBAN CASTLE

BEL. RPT. 12,276

1006 PRETORIA CASTLE

BEL. RPT. 12,385

001650-007618-0004

15.2.37

Nos 987 & 1006.

MIDSHIP SECTION.

SCALE 1/2" - 1 FOOT.

DIMENSIONS 560'-0" BP. x 76'-0" x 37'-0" MLD TO 2nd UPPER DECK.

TO LLOYDS CLASS 100 A1 WITH FREEBOARD FOR A DRAFT NOT EXCEEDING 29'-0" MLD all seasons.

ALL SECTIONS N.B.S.

D	(37 x 29/~~30.75~~) + 8	=	~~42.89~~ 43.52.
L x D	560 x ~~42.89~~	=	~~24018.40~~ 24371
L x (B+D)	560 x (76 + ~~42.89~~)	=	~~66578.40~~ 66931
L/D to Upper ~~SHADE~~ DK (LLOYDS UPPER DK)	560 ÷ 45.5	=	12.3
L/D TO PROMENADE K	560 ÷ 54	=	10.37
d		=	16.875.

EQUIPMENT NUMERALS.

L x (B+D)		=	~~66578.4~~ 68040
SHADE DECK.	284 x .75 x 8.5	=	1810.5
" "	69 x .50 x 8.5	=	293.25
FORECASTLE DECK.	105 x .75 x 8.5	=	669.38
PROMENADE DK HOUSE.	208 x .50 x 8.5	=	884.00
" " "	45 x .50 x 8.5	=	191.25
UPPER PROM DK HOUSE.	172 x .50 x 8.5	=	731.00
BOAT DECK HOUSE.	140 x .50 x 8.0	=	560.00
			~~71717.78~~

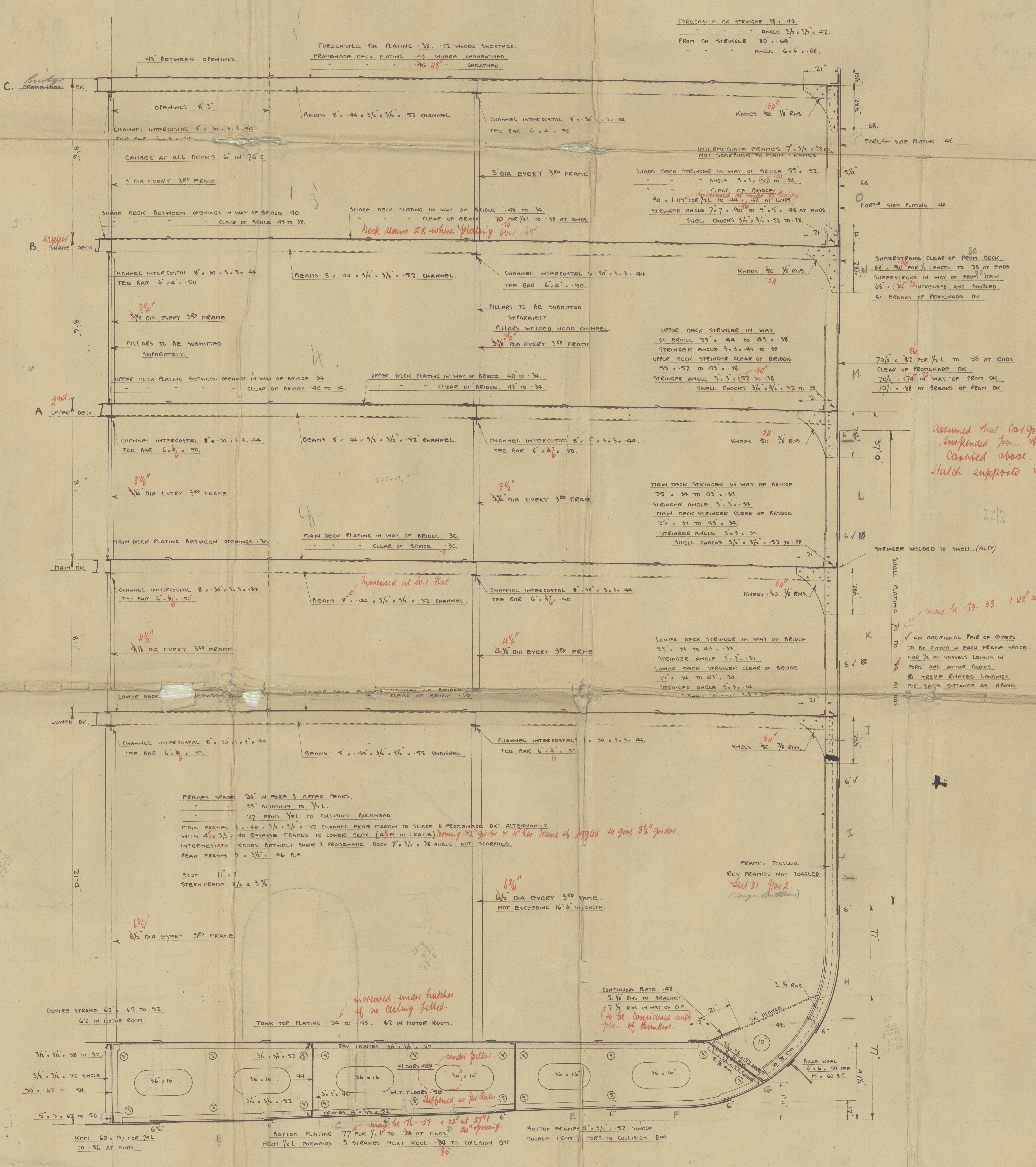
to be verified when dk. plans are submitted. No not to exceed 73400.

73179.38

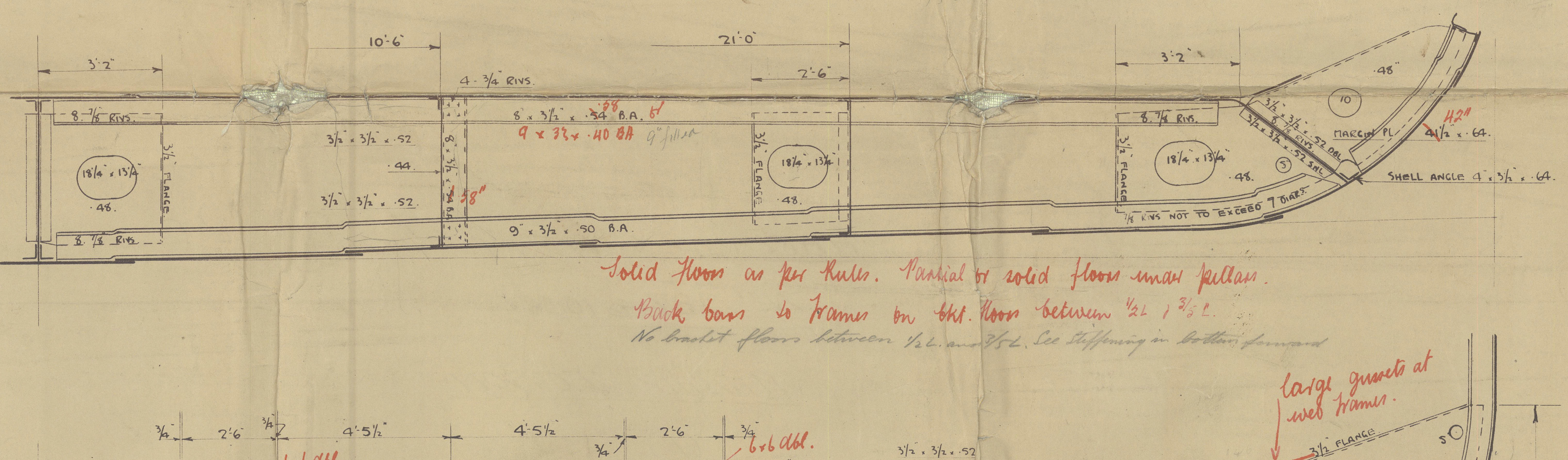
EQUIPMENT Lt

3 BOWER ANCHORS (STOCKLESS) 118 112 CWTS (COLL WT. 336 CWTS). OR 2 @ 118 + 1 @ 100.
1 STREAM ANCHOR (EX STOCK) 35 1/2 CWTS.
330 FTHMS 3" STUD CHAIN CABLE.
150 FTHMS 6" STEEL WIRE (STREAM) 6 x 24 flexible
140 " 7" " " (TOWLINE) " "
3 @ 120 FTHMS 2 3/4" " " OR 8" HEMP (HAWSERS)
3 @ 120 " 2 3/4" " " 8" " (WARPS). 6 x 12 flexible

app Lt. all See letter 26.2.37


FORECASTLE DK PLATING .38. .32 WHERE SHEATHED.
PROMENADE DECK PLATING .48 WHERE UNSHEATHED.
" " " ~~.45~~ .48" " SHEATHED.
FORECASTLE DK STRINGER 38 x .42
" " " ANGLE 3 1/2" x 3 1/2" x .42.
PROM DK STRINGER 80" x .64"
" " " ANGLE 6" x 6" x .68.
48" BETWEEN OPENINGS.
C. Bridge ~~PROMENADE~~ DK
OPENINGS 8'-3"
BEAMS 8" x .44 x 3 1/2" x 3 1/2" x .52 CHANNEL.
CHANNEL INTERCOSTAL 8" x .30 x 3 x 3 x .44
TEE BAR 6" x 4" x .50
21"
10 1/2"
28 1/2"
KNEES .50 .54" 7/8" RIVS.
.68.
P
FORECLE SIDE PLATING .48.
9'-8"
CAMBER AT ALL DECKS 6" IN 76'-0"
INTERMEDIATE FRAMES 7" x 3 1/2" x .38 OA
NOT SCARPHED TO MAIN FRAMES
3" DIA EVERY 3RD FRAME.
SHADE DECK STRINGER IN WAY OF BRIDGE 55" x .52.
" " " ANGLE 3 x 3 x ~~.52~~ .50 TO .38.
" " " CLEAR OF BRIDGE increased at ends of Bridge
80" x 1.05 FOR 1/2 L TO .44 x .48 AT ENDS.
STRINGER ANGLE 7" x 7" x ~~.90~~ .96 TO 5" x 5" x .48 AT ENDS.
SHELL CHOCKS 3 1/2" x 3 1/2" x .52 TO .38.
5 1/4"
.68.
O
FORECLE SIDE PLATING .48
SHADE DECK BETWEEN OPENINGS IN WAY OF BRIDGE .40.
" " " " CLEAR OF BRIDGE .48 TO .38.
SHADE DECK PLATING IN WAY OF BRIDGE .48 TO .34.
" " " CLEAR OF BRIDGE .70 FOR 1/2 L TO .38 AT ENDS.
Deck seams 2R where plating over .68". .74
B. Upper SHADE DECK
CHANNEL INTERCOSTAL 8" x .30 x 3 x 3 x .44.
TEE BAR 6" x 4" x .50
BEAMS 8" x .44 x 3 1/2" x 3 1/2" x .52 CHANNEL.
KNEES ~~.50~~ .54 7/8" RIVS.
N
SHEERSTRAKE CLEAR OF PROM DECK BR.
68" x ~~.90~~ .96 FOR 1/2 LENGTH TO .58 AT ENDS.
SHEERSTRAKE IN WAY OF ~~PROM~~ BR. DECK
68" x ~~.74~~ .73 INCREASED AND DOUBLED
AT BREAKS OF PROMENADE DK.
9'-8"
3 3/8 3 1/2" DIA EVERY 3RD FRAME.
PILLARS TO BE SUBMITTED SEPARATELY.
PILLARS WELDED HEAD AND HEEL.
UPPER DECK STRINGER IN WAY OF BRIDGE 55" x .44 TO 43 x .38.
STRINGER ANGLE 3 x 3 x .44 TO .38
UPPER DECK STRINGER CLEAR OF BRIDGE
55" x .52 TO 43" x .38.
STRINGER ANGLE 3" x 3" x ~~.52~~ .50" TO .38
SHELL CHOCKS 3 1/2" x 3 1/2" x .52 TO .38.
M
70 1/2" x ~~.82~~ .86 FOR 1/2 L TO .58 AT ENDS
CLEAR OF PROMENADE DK.
70 1/2" x ~~.74~~ .73 IN WAY OF PROM DK.
70 1/2" x .88 AT BREAKS OF PROM DK
UPPER DECK PLATING BETWEEN OPENINGS IN WAY OF BRIDGE .34
" " " " " CLEAR OF BRIDGE .40 TO .34.
UPPER DECK PLATING IN WAY OF BRIDGE. .40 TO .34.
" " " CLEAR OF BRIDGE. .48" TO .34.
A 2nd UPPER DECK
CHANNEL INTERCOSTAL 8" x .30" x 3 x 3 x .44
TEE BAR 6" x ~~4~~ 6" x .50.
BEAMS 8" x .44 x 3 1/2" x 3 1/2" x .52" CHANNEL.
KNEES ~~.50~~ .54 7/8" RIVS.
6"
37'-0"
8'-1"
3 3/4 3 1/8" DIA EVERY 3RD FRAME
L
MAIN DECK STRINGER IN WAY OF BRIDGE
55" x .34 TO 43" x .34.
STRINGER ANGLE 3" x 3" x .34"
MAIN DECK STRINGER CLEAR OF BRIDGE
55" x .34 TO 43" x .34.
STRINGER ANGLE 3" x 3" x .34.
SHELL CHOCKS 3 1/2" x 3 1/2" x .52 TO .38.
6" ✓ ☒
MAIN DECK PLATING BETWEEN OPENINGS .30
MAIN DECK PLATING IN WAY OF BRIDGE .30.
" " " CLEAR OF BRIDGE .30.
STRINGER WELDED TO SHELL. (ALTY)
MAIN DK
CHANNEL INTERCOSTAL 8" x .30" x 3 x 3 x .44
TEE BAR 6" x ~~4~~ 6" x .50"
Increased at W.T. Flat.
BEAMS 8" x .44 x 3 1/2" x 3 1/2" x .52 CHANNEL.
KNEES ~~.50~~ .54" 7/8" RIVS.
SHELL PLATING .74 TO .54 AT ENDS.
may be .73 - .53 + .02" at 27" & 24" spacing.
8'-1"
4 3/8 4 1/2" DIA EVERY 3RD FRAME.
K
LOWER DECK STRINGER IN WAY OF BRIDGE
55" x .34 TO 43 x .34.
STRINGER ANGLE 3" x 3" x .34.
LOWER DECK STRINGER CLEAR OF BRIDGE
55" x .34 TO 43" x .34.
STRINGER ANGLE 3" x 3" x .34
SHELL CHOCKS 3 1/2" x 3 1/2"
✓ AN ADDITIONAL PAIR OF RIVETS
TO BE FITTED IN EACH FRAME SPACE
FOR 1/4 OF VESSELS LENGTH IN
FORE AND AFTER BODIES.
☒ TREBLE RIVETED LANDINGS
FOR SAME DISTANCE AS ABOVE
6" ✓ ☒
LOWER DECK BETWEEN OPENINGS .30
LOWER DECK PLATING IN WAY OF BRIDGE .30
" " " CLEAR OF BRIDGE .30.
LOWER DK
CHANNEL INTERCOSTAL 8" x .30" x 3" x 3" x .44
TEE BAR 6" x ~~4~~ 6" x .50.
BEAMS 8" x .44" x 3 1/2" x 3 1/2" x .52 CHANNEL.
CHANNEL INTERCOSTALS 8" x .30" x 3 x 3 x .44
TEE BAR 6" x ~~4~~ 6" x .50
KNEES ~~.50~~ .54" 7/8" RIVS.
J
6" ✓
FRAMES SPACED 24" IN FORE & AFTER PEAKS.
" " 33" AMIDSHIPS TO 3/5 L.
" " 27" FROM 3/5 L TO COLLISION BULKHEAD.
MAIN FRAMES 8" x .40 x 3 1/2" x 3 1/2" x .52 CHANNEL FROM MARGIN TO SHADE & PROMENADE DKS ALTERNATELY.
WITH 4 1/2" x 3 1/2" x .40 REVERSE FRAMES TO LOWER DECK. (4 1/2 FL TO FRAME) forming 8 1/2" girder or 4" Rev. frame if joggled to give 8 1/2" girder.
INTERMEDIATE FRAMES BETWEEN SHADE & PROMENADE DECK 7" x 3 1/2" x .38 ANGLE NOT SCARPHED.
PEAK FRAMES 9" x 3 1/2" x .46 B.A.
STEM 11" x 3"
STERN FRAME 11 1/2" x 3 3/8".
I
FRAMES TOGGLED.
REV FRAMES NOT TOGGLED.
Sect 31 Par 2.
(Cargo bottoms)
21'-4"
~~6 1/2~~ 6 3/4" DIA EVERY 3RD FRAME
~~6 1/2~~ 6 3/4" DIA EVERY 3RD FRAME.
NOT EXCEEDING 16'-6" IN LENGTH.
6"
7'-7"
H
3. 7/8 RIVS.
CONTINUOUS PLATE .48
5. 7/8 RIVS TO BRACKET.
7. 7/8 RIVS IN WAY OF O.F.
to be considered with plan of Bunkers.
21"
12"
3 1/2 FLANGE.
.48.
10"
CENTRE STRAKE 62" x .62 TO .52
.62 IN MOTOR ROOM.
increased under hatches if no ceiling fitted.
TANK TOP PLATING .54 TO .48. .62 IN MOTOR ROOM.
REV FRAMES 3 1/2" x 3 1/2" x .52
3 1/2" x 3 1/2" x .58 TO .52.
3 1/2" x 3 1/2" x .52 SINGLE.
50" x .62 TO .54.
5" x 5" x .62 TO .56
36" x 16"
3 1/2" x 3 1/2" x .52.
.44
3" x 3" x .46
FLOORS .48 under pillar
W.T. FLOORS .56 Stiffened as per Rules.
FRAMES 4" x 3 1/2" x .52
3 1/2" x 3 1/2" x .52 DOUBLE
8. 7/8 RIVS.
3 1/2" x 3 1/2" x .52 SINGLE
8. 7/8 RIVS.
14. 7/8 RIVS.
BILGE KEEL
6" x 6" x .54 TEE
15" x .60 B.P.
G
7'-7"
4'-7 1/2"
1'-1"
12"
6"
6 3/4"
B
C
D
E
F
KEEL 60" x .97 FOR 3/5 L
TO .86 AT ENDS.
BOTTOM PLATING .77 FOR 1/2 L TO .58 AT ENDS.
may be .76 - .57 + .02" at 27" & 24" spacing.
FROM 1/2 L FORWARD 3 STRAKES NEXT KEEL ~~.84~~ .85 TO COLLISION BHD
BOTTOM FRAMES 4" x 3 1/2" x .52 SINGLE.
DOUBLE FROM 1/2 FORR TO COLLISION BHD

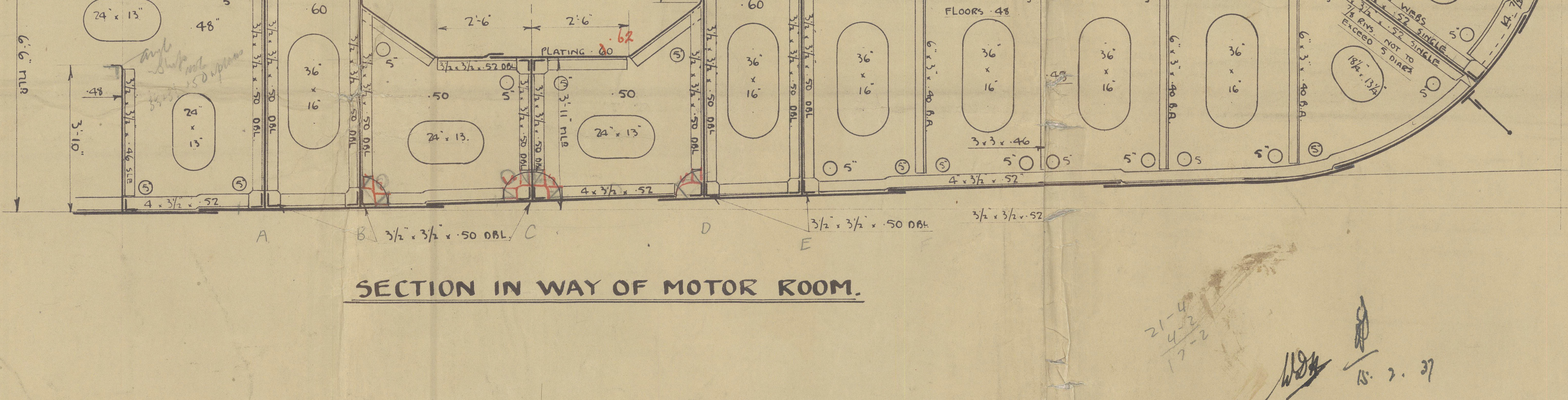
Assumed that Cargo will not be suspended from the beams when Cargo carried above.
Hatch supports to be submitted.


10'-6"
21'-0"
3'-2"
4. 3/4 RIVS.
2'-6"
3'-2"
.48"
8. 7/8 RIVS.
8" x 3 1/2" x ~~.54~~ .58 B.A. .61
9 x 3 1/2 x .40 BA 9" filler
3 1/2" x 3 1/2" x .52
.44.
3 1/2" x 3 1/2" x .52.
18 1/4" x 13 1/4"
.48.
3 1/2" FLANGE
.58"
3 1/2" FLANGE
8. 7/8 RIVS.
10
3 1/2" x 3 1/2" x .52 DBL
8. 7/8 RIVS
3 1/2" x 3 1/2" x .52 SNL
MARGIN PL
~~4 1/2~~ 4 2" x .64.
SHELL ANGLE 4" x 3 1/2" x .64.
7/8 RIVS NOT TO EXCEED 7 DIARS.
9" x 3 1/2" x .50 B.A.

Solid floors as per Rules. Partial or solid floors under pillars.

Back bars to frames on bkt. floors between 1/2 L & 3/5 L.

No bracket floors between 1/2 L and 3/5 L. See stiffening in bottom forward


Large gussets at web frames.
3/4"
2'-6"
4'-5 1/2"
4'-5 1/2"
2'-6"
6x6 dbl.
6x6 dbl.
.62
6" O.R. 1" RIVS
PLATING 1.25
WELD.
1'-2"
62
3 1/2" x 3 1/2" x .52
3 1/2" x 3 1/2" x .52 DBL.
6 x 6 x .75
3 1/2" FLANGE
.48
24" x 13"
48"
.60
36" x 16"
5"
6'-6" MLD
3'-10"
.48
24" x 13"
2'-6"
2'-6"
PLATING ~~.60~~ .62
3 1/2 x 3 1/2 x .52 DBL
.50
3'-11" MLD
3 1/2" x 3 1/2" x .50 DBL
3 1/2" x 3 1/2" x .46 SLB
FLOORS .48
6" x 3" x .40 B.A.
3 x 3 x .46
DBL AT WEBS
3 1/2" x 3 1/2" x .52 SINGLE
7/8 RIVS NOT TO EXCEED 5 DIARS
18 1/4" x 13 1/4"
14. 7/8 RIVS
8'-6"
4 x 3 1/2" x .52
3 1/2" x 3 1/2" x .50 DBL.
3 1/2" x 3 1/2" x .52
A
B
C
D
E

SECTION IN WAY OF MOTOR ROOM.

W.D. 15.3.37

HARLAND & WOLFF LTD
LONDON GLASGOW
3rd Feb 37
BELFAST
LIVERPOOL & SOUTHAMPTON
SHIPBUILDERS & ENGINEERS

HARLAND & WOLFF

Nos 987 & 1006

STERNFRAME & BOSS ARMS

③

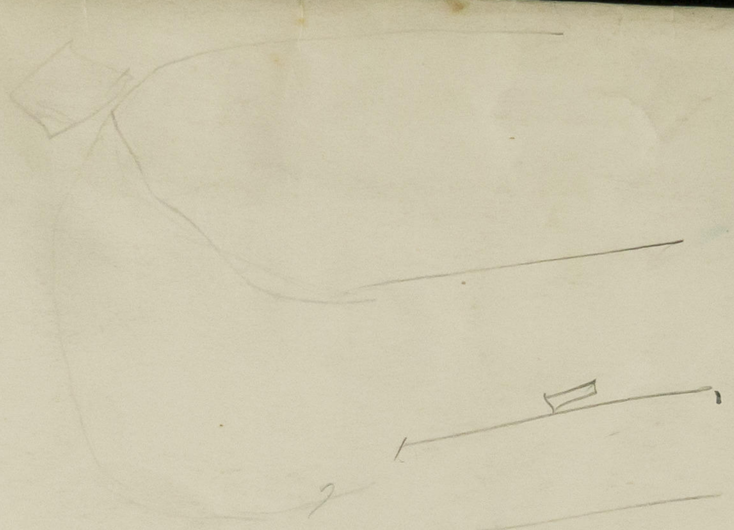
987. DURBAN CASTLE

BEL. RPT. 12276.

1006 PRETORIA CASTLE

BEL. RPT. 12363

M/M 2630



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Foundation

26.2.37

Nos 987 & 1006

STERNFRAME & BOSS ARMS.

SCALE :- 1/2" = ONE FOOT

MATERIAL:- MILD STEEL CASTING,
PINTLE - FORGED STEEL.

NOTES:-

FORGED STEEL PINTLE COMPLETE WITH HEXAGONAL NUT, SPLIT PIN, SET PIN IN LIFTING HOLE, & G.M. LINER TO BE SUPPLIED BY CONTRACTORS.

RIVET HOLES TO BE DRILLED BY CONTRACTORS AND TO BE 1/16 LARGER THAN DIA. OF RIVETS SHOWN

HOLES IN GUDGEON AND RUDDER TRUNK TO BE ACCURATELY ALIGNED IN ORDER TO OBTAIN CORRECT ADJUSTMENT OF RUDDER

STERNFRAME AND BOSS ARMS TO BE ASSEMBLED AT CONTRACTORS WORKS, CAREFULLY CHECKED, AND THEN TAKEN APART

CARE TO BE TAKEN THAT THICKNESSES OF METAL DIMENSIONED ON PLANS OF FULL SIZE SECTIONS ARE ADHERED TO.

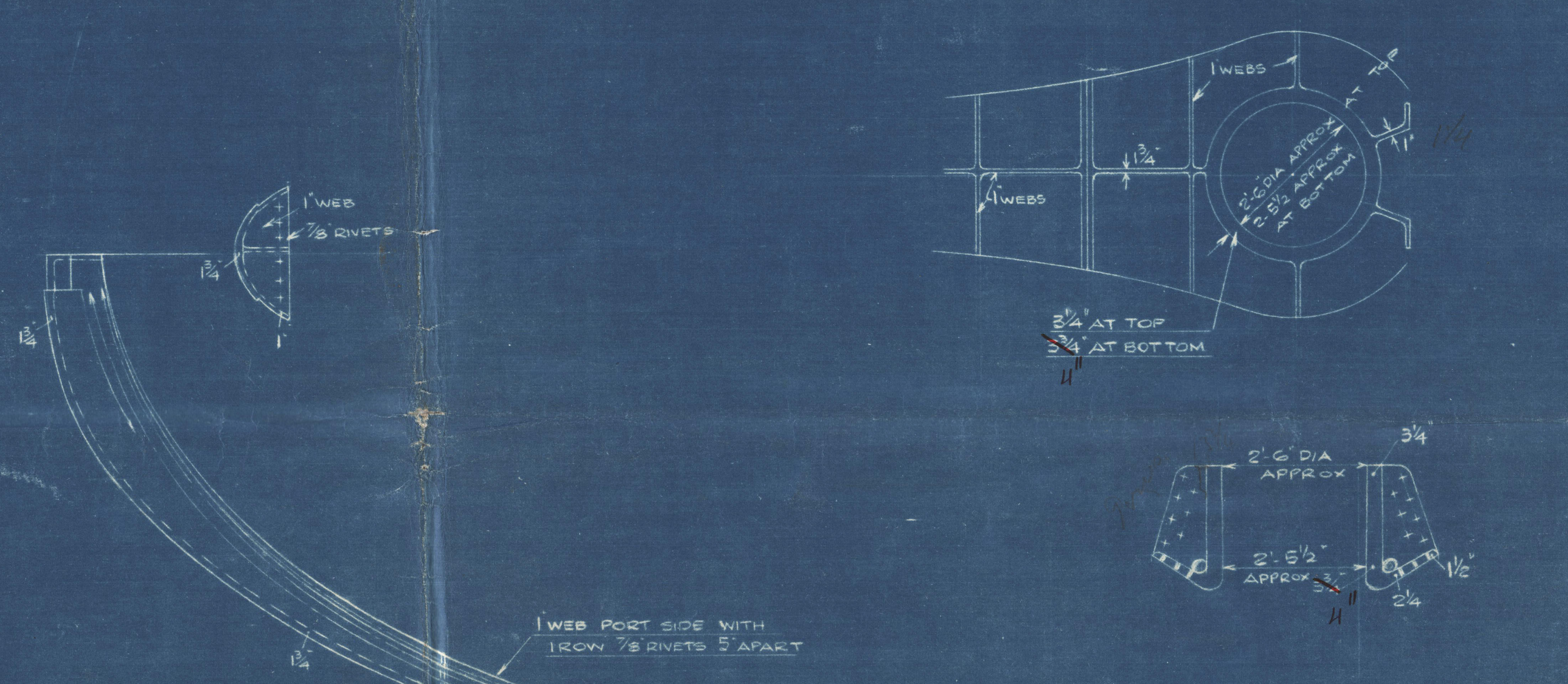
TESTS :- LLOYDS AND BOARD OF TRADE.

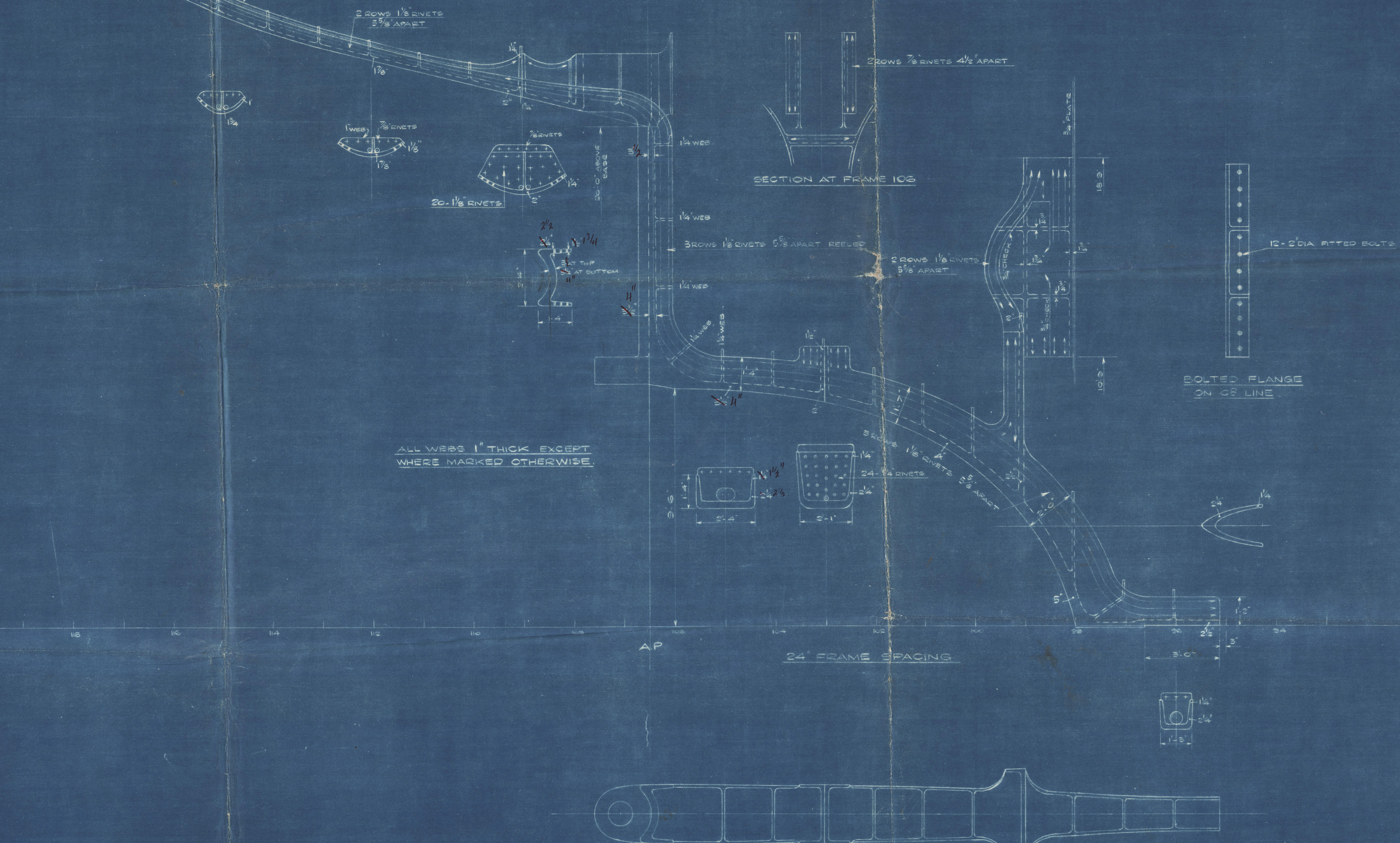
PARTS TO BE MACHINED [TINTED RED]

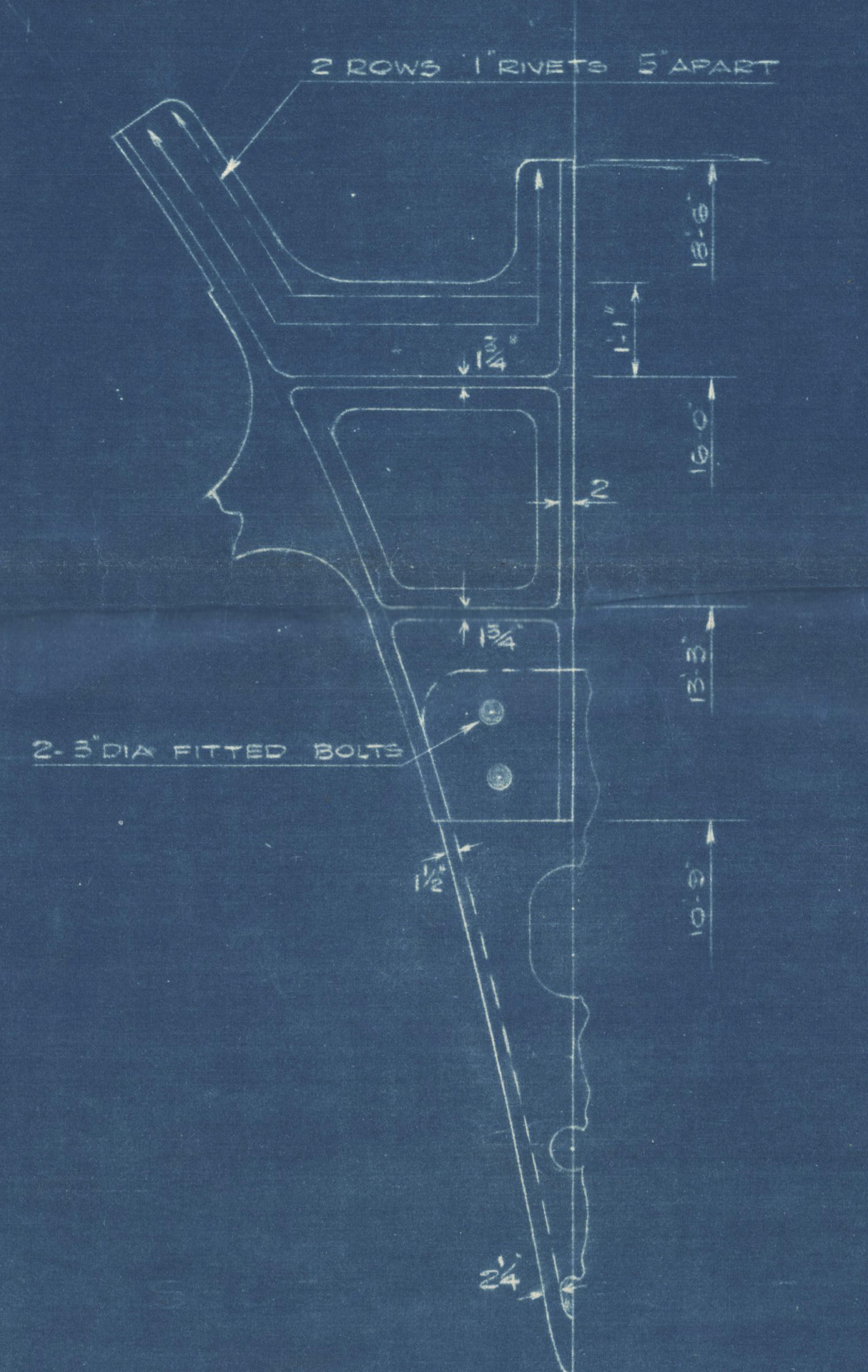
BEARING SURFACES AT COUPLINGS -	FRAMES 99, 103, & 109
TOP & INSIDE OF RUDDER TRUNK	BORE & BOTTOM OF GUDGEON
BORE & ENDS OF BOSSING	PINTLE
BOLTED FLANGES OF BOSS ARMS ON ℄	CHECK IN WAY OF KEEL

PARTICULARS OF SHAFTING.

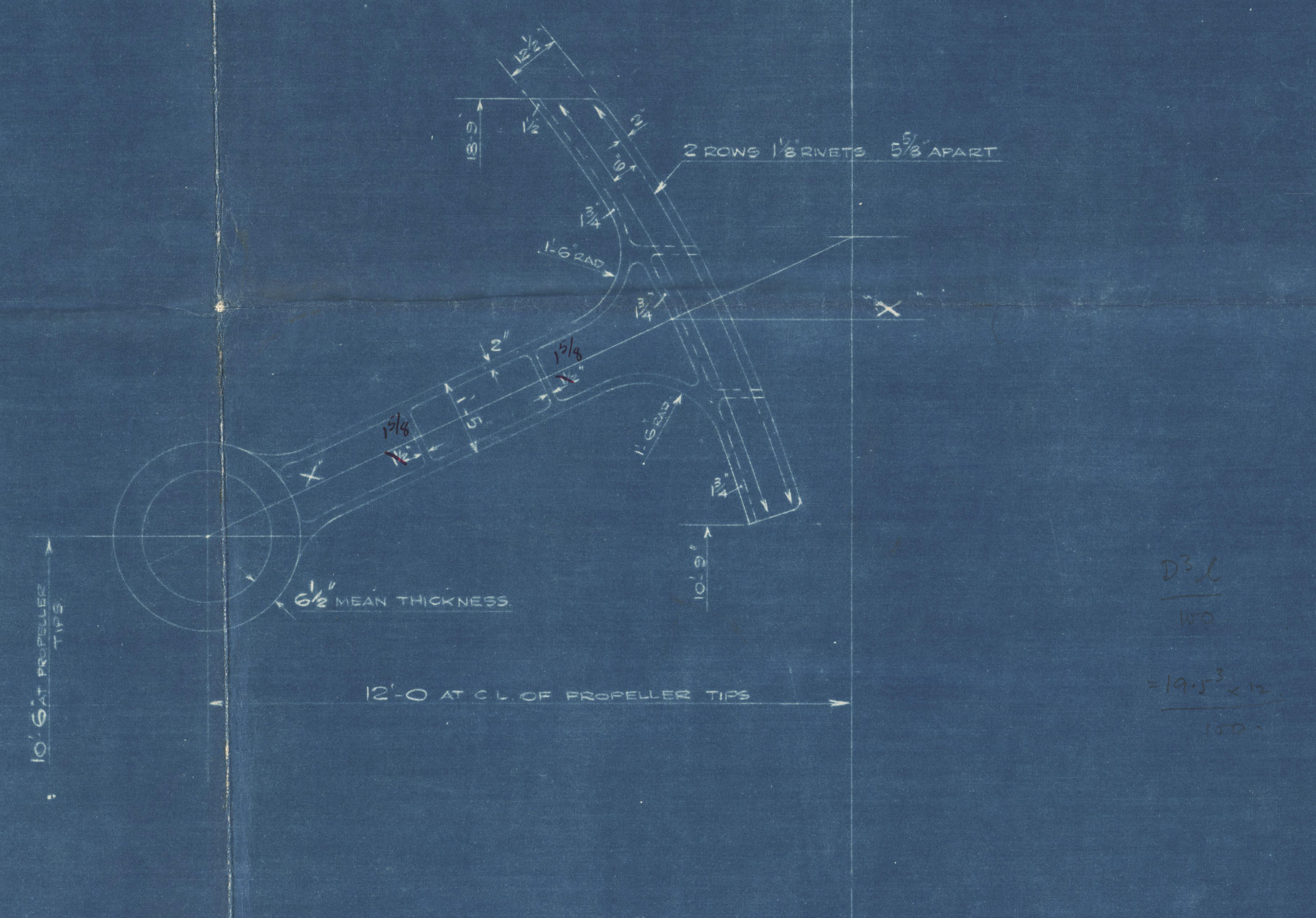
HEIGHT TO C.L. OF SHAFT AT	
HALF BREADTH " " "	
HEIGHT TO C.L. " " "	
HALF BREADTH " " "	
RAKE IN FROM PROPELLER INCH PER FOOT	
" DOWN " " " " "	
DIAMETER OF TAIL SHAFT	= 19½


1" WEBS
1¾"
1" WEBS
2'-6" DIA APPROX AT TOP
2'-5½" APPROX AT BOTTOM
1"
1¼
~~3¾"~~ 4" AT TOP
~~3¼"~~ 4" AT BOTTOM
1" WEB
7/8" RIVETS
1¾"
1"
1¾"
2'-6" DIA APPROX
3¼
2'-5½" APPROX
~~3¼"~~ 4"
2¼
1½"


1 WEB PORT SIDE WITH 1 ROW 7/8" RIVETS 5" APART
2 ROWS 1⅛" RIVETS 5⅝" APART
1¾"
1⅞"
1¼"
2"
¾"
1"
1¾
1" WEB
7/8" RIVETS
1⅛"
1⅞"
7/8" RIVETS
1¼"
2"
20-1⅛" RIVETS
20'-0" ABOVE BASE
~~3½~~
1¼" WEB
1¼" WEB
1¼" WEB
3 ROWS 1⅛" RIVETS 5⅝" APART REELED
~~2¼"~~ 2½
~~1½~~ 1¾
~~3¼~~ 4" AT TOP
~~3¼~~ 4" AT BOTTOM
1'-4"
~~3½~~ 4"
2 ROWS 7/8" RIVETS 4½" APART
SECTION AT FRAME 103
¾" PLATE
18'-9"
10'-9"
2 ROWS 1⅛" RIVETS 5⅝" APART
¾" CHECK
1¾"
2"
12-2" DIA FITTED BOLTS
BOLTED FLANGE ON C.L. LINE
1¼" WEB
1¼" WEB
1½"
1'-4"
~~3½~~ 4"
2"
1'-7"
3 ROWS 1⅛" RIVETS 5⅝" APART
4"
2½"
2'-0"
ALL WEBS 1" THICK EXCEPT WHERE MARKED OTHERWISE.
~~1~~ 1½"
~~2¼~~ 2½
1'-4"
9'-6"
2'-4"
1¼"
24-1¼" RIVETS
2¼"
2'-1"
2¼
1¼
5"
1'-2"
2½"
3"
3'-0"
108
106
104
102
100
98
96
94
AP
24" FRAME SPACING
1¼"
2¼"
1'-3"


2 ROWS 1" RIVETS 5" APART
18'-6"
1'-1"
1¾"
16'-0"
2
1¾"
13'-3"
2-3" DIA FITTED BOLTS
1½"
10'-9"
2¼"

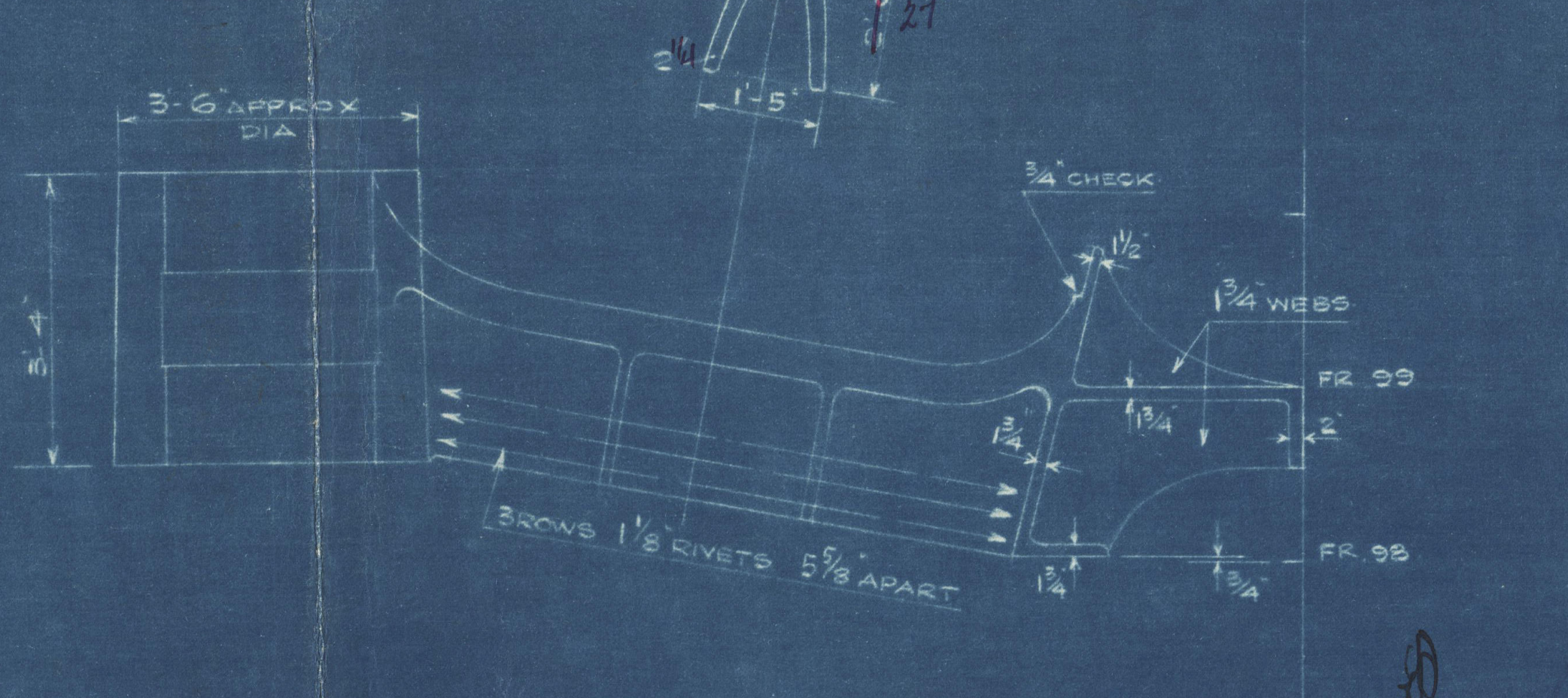
SECTION AT FRAME 99.


12½"
18'-9"
½"
2"
6"
2 ROWS 1⅛" RIVETS 5⅝" APART
1¾"
1'-6" RAD
1¾"
"X"
2"
1⅝
~~1½"~~
1'-5"
1⅝
~~1½"~~
"X"
1'-6" RAD
1¾"
10'-9"
6½" MEAN THICKNESS.
10'-6" AT PROPELLER TIPS
12'-0 AT C.L. OF PROPELLER TIPS

SECTION ¾" AFT OF FRAME 98.

D³l / 100

= 19.5³ × 12 / 100


3"
~~2½"~~
2¼"
27"
1'-5"
3-6" APPROX DIA
3'-4"
¾" CHECK
1½"
1¾" WEBS
FR. 99
1¾"
2"
1¾"
3 ROWS 1⅛ RIVETS 5⅝" APART
1¾"
¾"
FR. 98

PLAN VIEW AT "X X"

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17.2.37.

27.7.37

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002630-002638-0003

HARLAND & WOLFF

Nos 987 & 1006

RUDDER

M/M. 2630

④

987. DURBAN CASTLE.
BEL. RPT. 12,276.
1006 PRETORIA CASTLE.
BEL. RPT. 12,363

002630-002638-0001

26.2.37

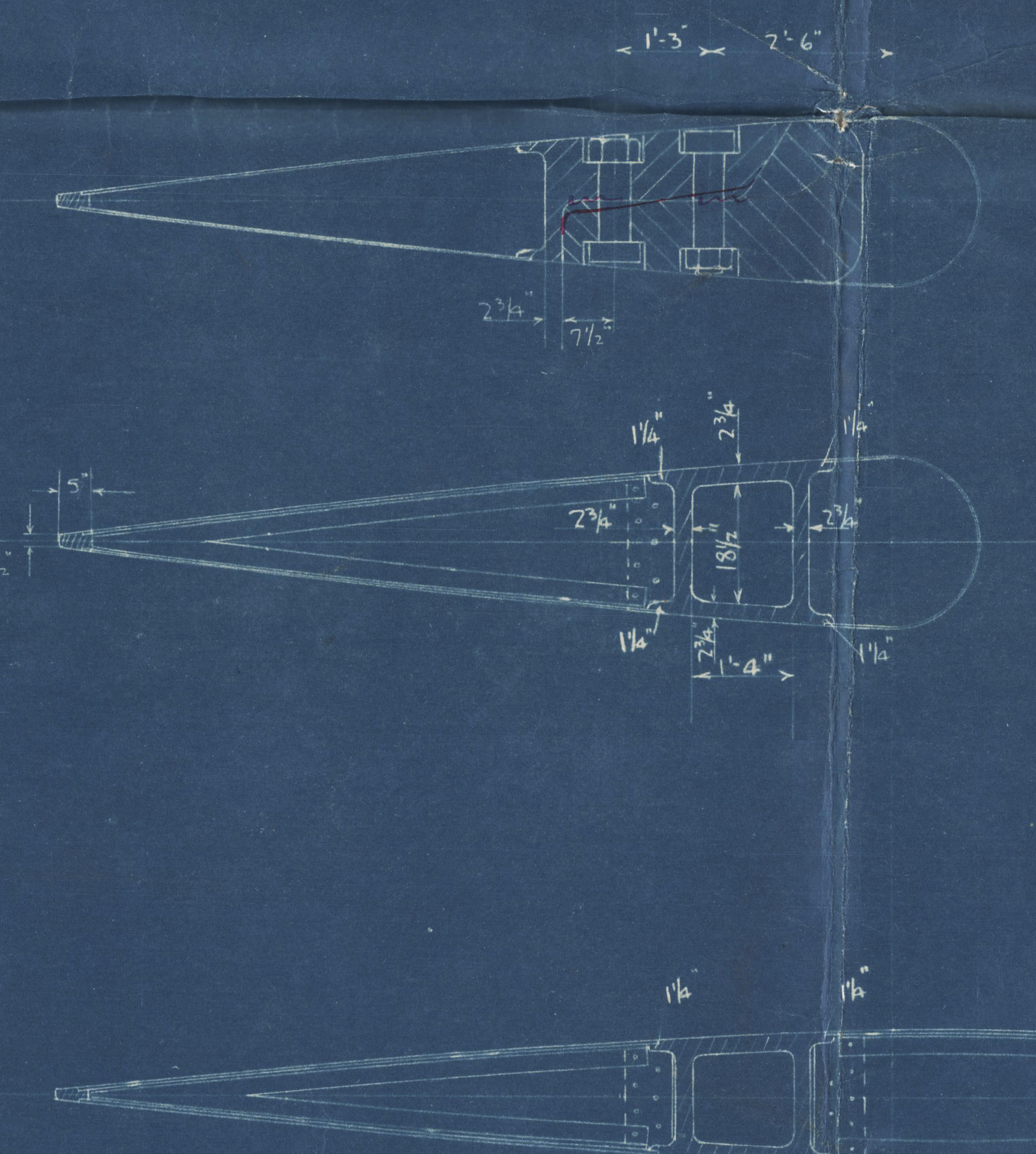
Nos 987 & 1006

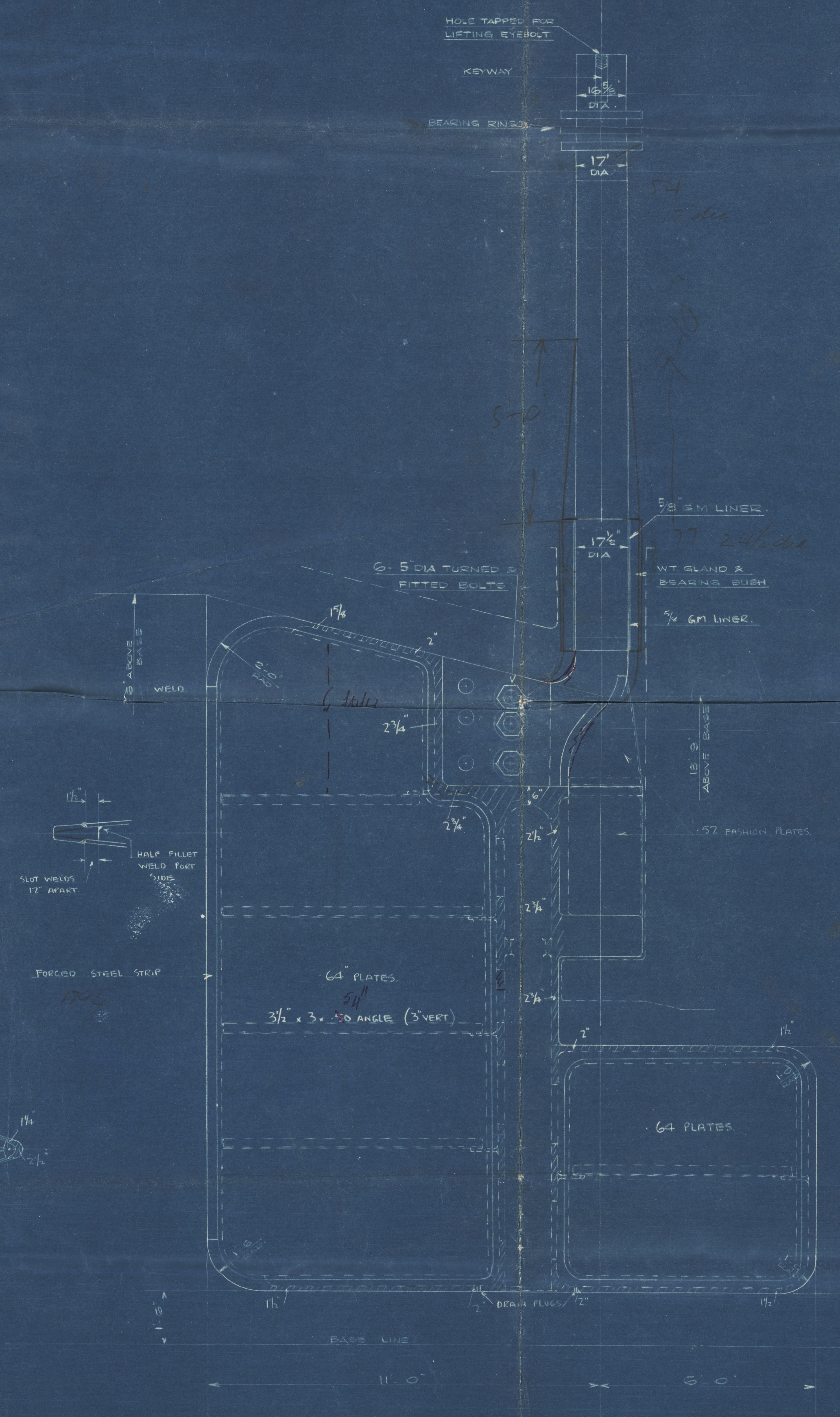
RUDDER.

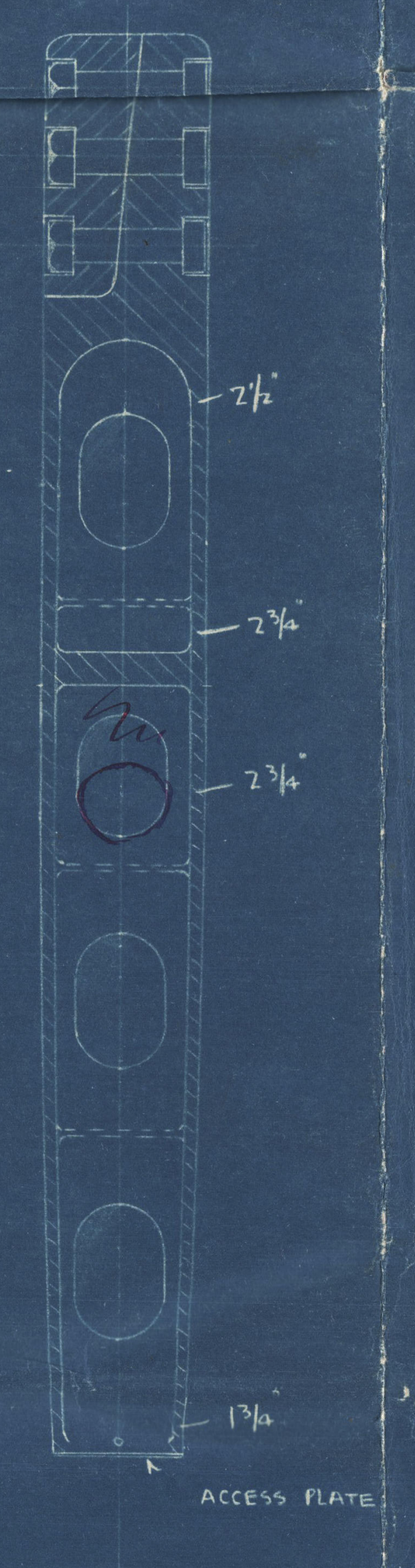
SCALE:- ½" = ONE FOOT.

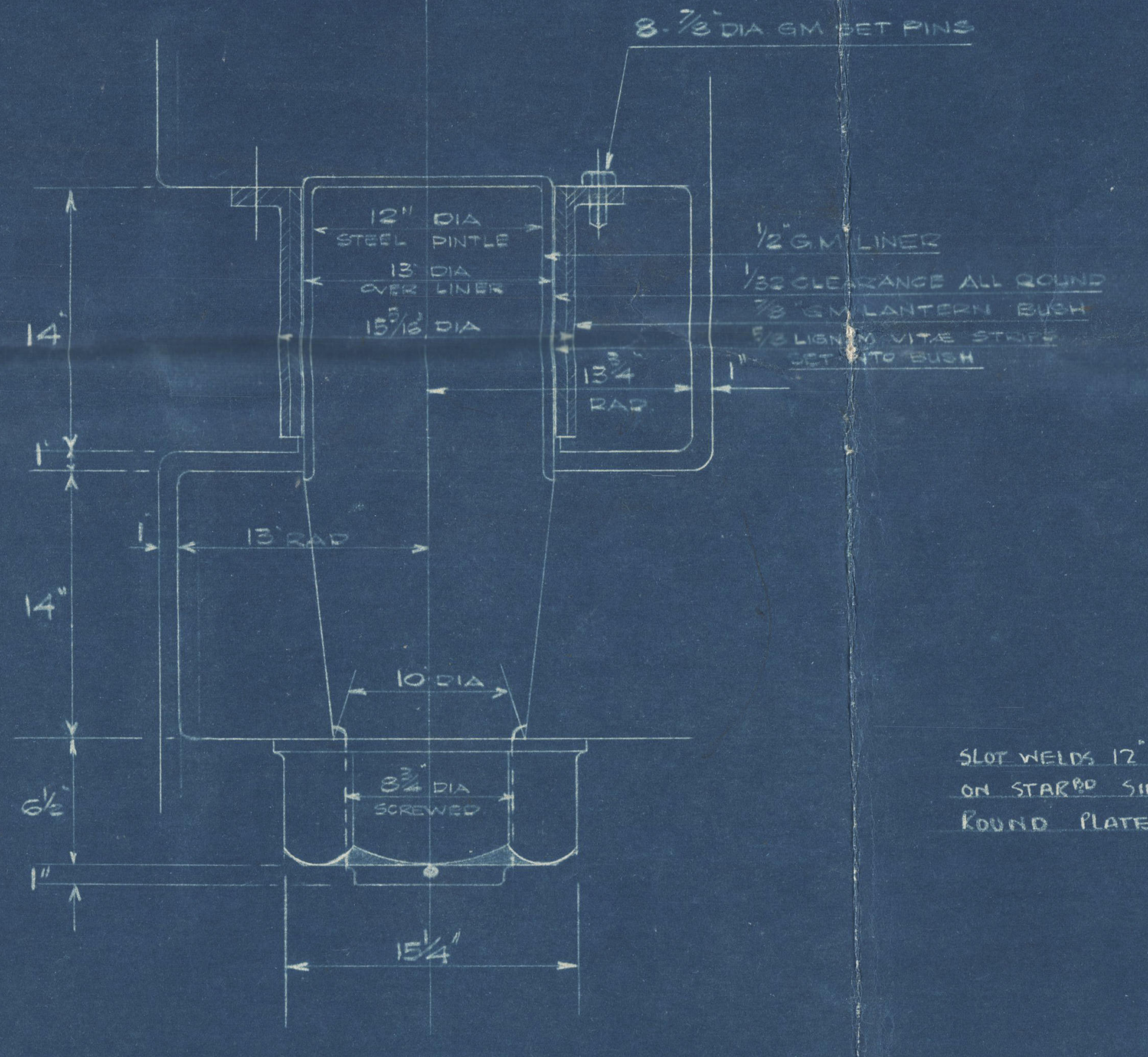
MATERIAL:- RUDDER STOCK - FORGED STEEL.
RUDDER FRAME - MILD STEEL CASTING.
TESTS LLOYDS AND BOARD OF TRADE.

SPEED OF VESSEL = 19 KNOTS
MAX. ANGLE OF HELM = 35°
TOTAL EFFECTIVE AREA = 244 $\square'$
AREA COEFFICIENT :- 560 × 28.8 ÷ 244 = 66.1


1'-3"
2'-6"
2¾"
7½"
5"
1½"
1¼"
2¾"
2¾"
18½"
2¾"
1¼"
1¼"
2¾"
1'-4"
1¼"
1¼"
1¼"
2½"

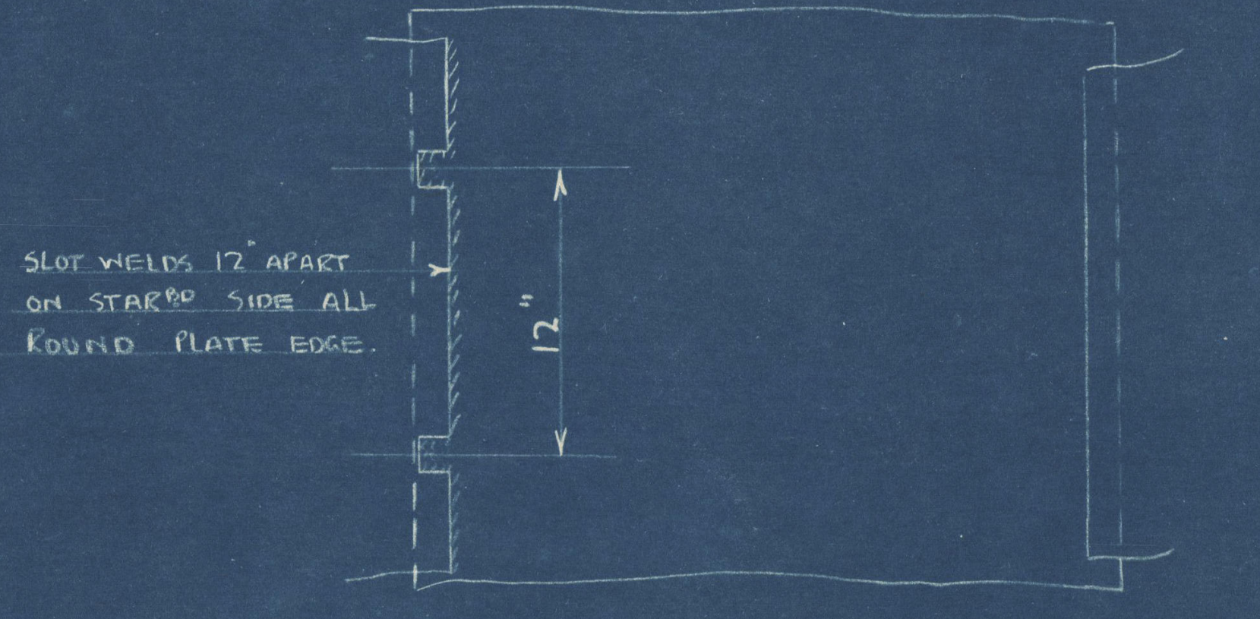

HOLE TAPPED FOR LIFTING EYEBOLT
KEYWAY
16⅝" DIA.
BEARING RINGS
17" DIA.
54
17" dia
5'-0"
⅝" G.M. LINER.
17½" DIA
77 24½ dia
6 - 5" DIA TURNED & FITTED BOLTS
W.T. GLAND & BEARING BUSH
⅝" GM LINER.
1⅝
2"
2'-0" RAD
ABOVE BASE
WELD.
2¾"
18'-9" ABOVE BASE
6"
2¾"
2½"
.52 FASHION PLATES.
2¾"
2¾"
1½"
HALF FILLET WELD PORT SIDE
SLOT WELDS 12" APART
FORGED STEEL STRIP
1704
.64" PLATES.
54"
3½" × 3 × .50 ANGLE (3" VERT)
2"
1½"
.64 PLATES
7'-0"
1½"
2"
DRAIN PLUGS
2"
1½"
1'-0"
1'-10"
BASE LINE
11'-0"
6'-0"


1'-2"
1'-2"
2½"
2¾"
2¾"
1¾"
ACCESS PLATE

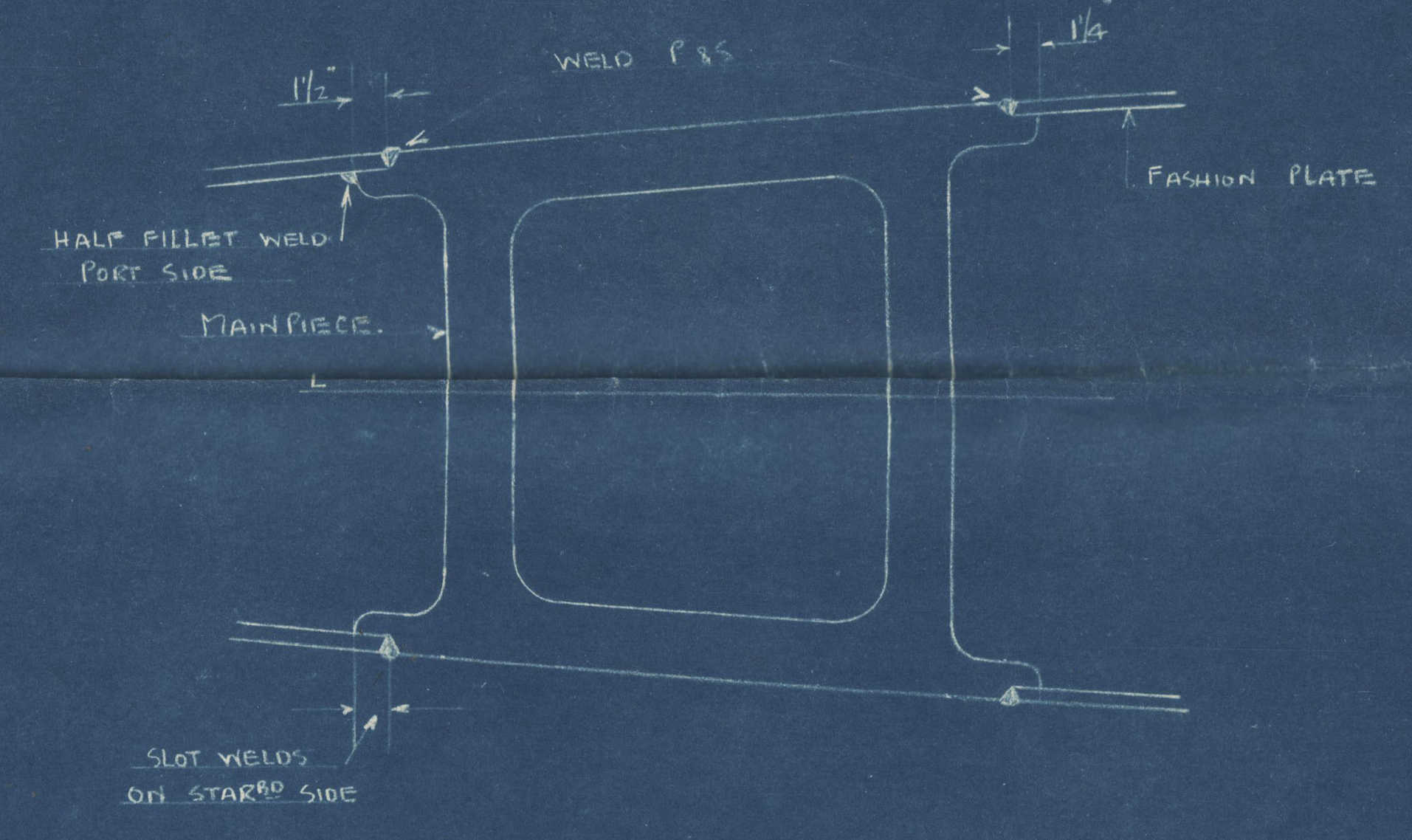

8 - ⅞" DIA GM SET PINS
12" DIA STEEL PINTLE
13" DIA OVER LINER
15⁵⁄₁₆ DIA
½" G.M. LINER
1/32 CLEARANCE ALL ROUND
⅞" G.M. LANTERN BUSH
⅝ LIGNUM VITÆ STRIPS SET INTO BUSH
13¾ RAD.
1"
14"
1"
1"
13" RAD
14"
10 DIA
8¾" DIA SCREWED
6½"
1"
15¼"

DETAIL OF PINTLE

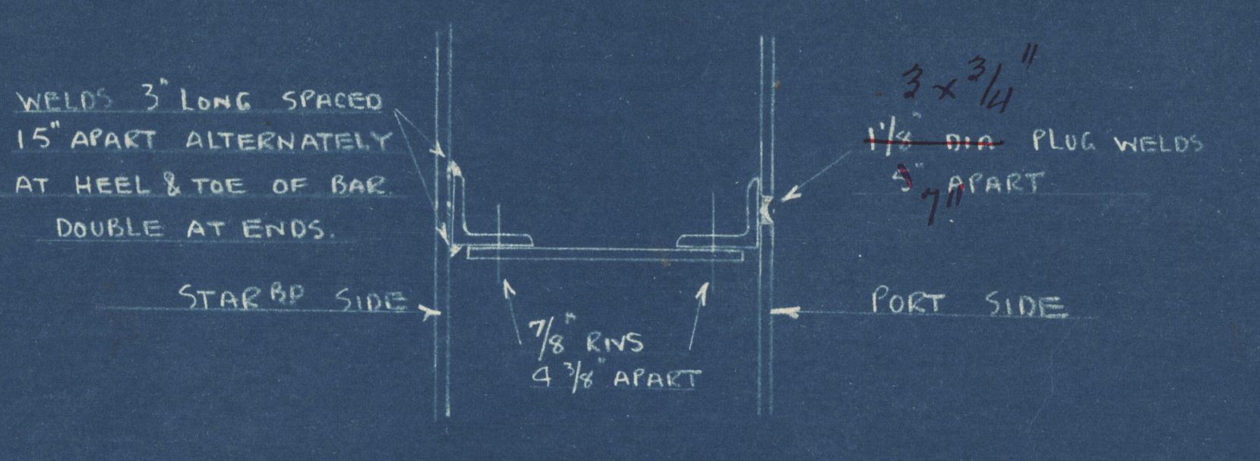
SCALE:- 1½" = ONE FOOT


SLOT WELDS 12" APART ON STARBD SIDE ALL ROUND PLATE EDGE.
12"

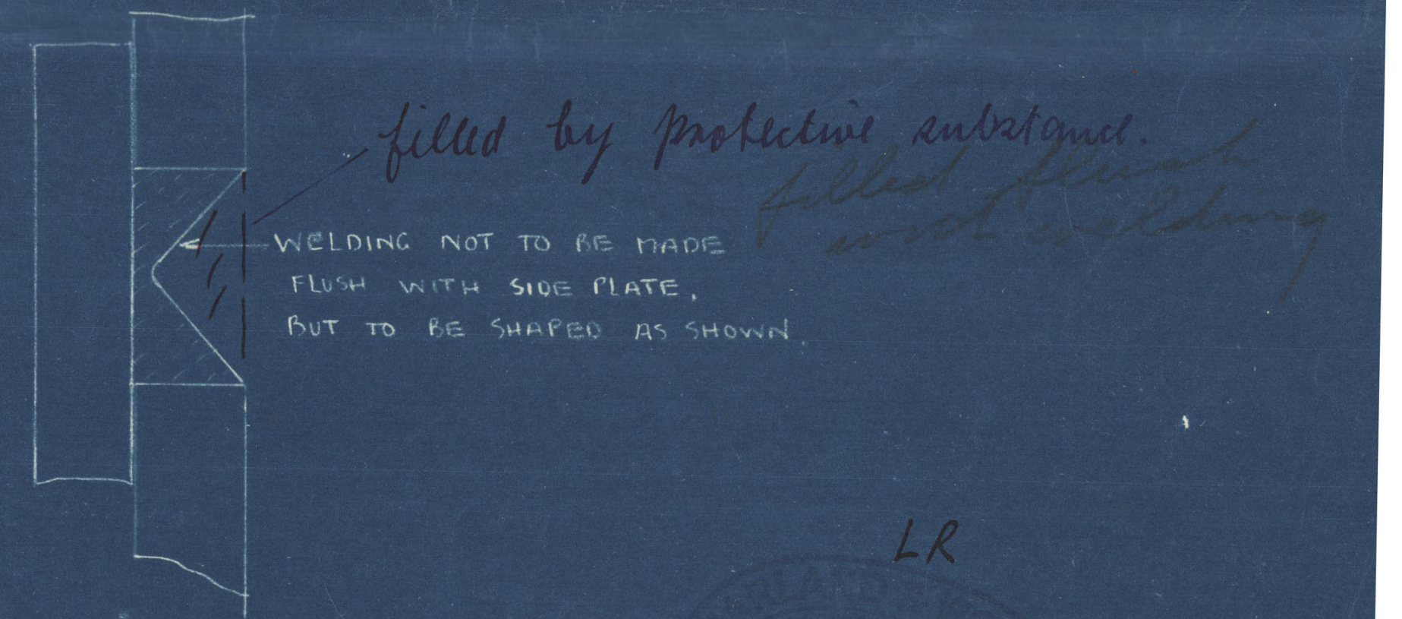
ELEVATION. STARBD SIDE


1½"
WELD P & S
1¼"
FASHION PLATE
HALF FILLET WELD PORT SIDE
MAINPIECE.
SLOT WELDS ON STARBD SIDE

WELDING OF PLATES TO MAINPIECE.


WELDS 3" LONG SPACED 15" APART ALTERNATELY AT HEEL & TOE OF BAR DOUBLE AT ENDS.
3 × ¾"
~~1½" DIA~~ PLUG WELDS
~~5"~~ 7" APART
STARBD SIDE
PORT SIDE
⅞" RIVS 4⅜" APART

WELDING OF STIFFENERS TO SIDE PLATES.


filled by protective substance.
filled flush not welding
WELDING NOT TO BE MADE FLUSH WITH SIDE PLATE, BUT TO BE SHAPED AS SHOWN.

DETAIL OF PLUG WELD.

LR

17.2.37.

27.4.37

002630-002638-0001